Task 6.1: Create an h5 file and store a single image and its mask into the file.

** **h5py** is a python library which is used to store data before we send it to train our network.

Step-1: use the code from task 4 to get two image files: the **img** and the **label.**

Step-2: now that you have an image and the label ready, we are going to create an h5 file to store the image and label. To create the h5 file we type:

```
import h5py

h5file = h5py.File("testfile.h5","w")
```

Here **"testfile.h5"** is the address of the file and since we are going to **write** to a file, the mode is set to **"w"**

Next, we need to create a dataset in the h5file which will hold the **img**.

```
h5file.create_dataset("image", img.shape)
```

"image" is the name of the dataset and **img.shape** is the shape of the image which we will store.

In order to store the image into the **"image"** named dataset of the **h5file** :

```
h5file["image"][…] = img
```

Repeat the same thing for the **label.** This time, create a dataset with a different name and it should have the shape of **label**.

Finally, you need to close the h5 file before you can exit the program.

```
h5file.close()
```

Task 6.2: Open an h5 file and view the image from the file.

Like before, open the file **h5file** but this time instead of "**w"** use **"r"** since we will only be reading/opening the images.

Use the following commands to extract the **img** from the dataset named **image:**

```
img  = h5file["image"][…]
```

use the same command to extract the **label** from the other dataset you created

close the h5file using the **close** command like before.

Use last part of the code from **task4** to plot the **img** and **label**.

If you can successfully display the image and label like before, then your **h5file is working.**